

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strike through~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (CURRENTLY AMENDED) A bread maker performing a plurality of bread making processes, in an oven compartment, which accommodates ingredients to make bread, at respective processing temperatures during predetermined processing times, comprising:

a door to open and close a front opening of the oven compartment;

a plurality of heaters heating the ingredients, to make the bread, in different directions from each other, the plurality of heaters comprising an upper oven heater in an upper part of an inside wall of the oven compartment, ~~and~~ a lower oven heater in a lower part of an inside wall of the oven compartment, and a door heater in an inside wall of the door;

a heater driving part supplying a driving power to each heater and to control a heating power of each heater;

a temperature sensor detecting a temperature of the oven compartment during multiple ones of the bread making processes;

a process condition storing part storing process condition data including the processing times and the processing temperatures of the plurality of bread making processes; and

a controller controlling the heater driving part to maintain temperature of the oven compartment at the processing temperature by controlling the heating power of each heater according to the temperature detected by the temperature sensor and the process condition data of the process condition storing part.

2. (CURRENTLY AMENDED) ~~The bread maker according to claim 1,~~

A bread maker performing a plurality of bread making processes, in an oven compartment, which accommodates ingredients to make bread, at respective processing temperatures during predetermined processing times, comprising:

a plurality of heaters heating the ingredients, to make the bread, in different directions from each other, the plurality of heaters comprising an upper oven heater in an upper part of an inside wall of the oven compartment and a lower oven heater in a lower part of an inside wall of

the oven compartment;

a heater driving part supplying a driving power to each heater and to control a heating power of each heater;

a temperature sensor detecting a temperature of the oven compartment during multiple ones of the bread making processes;

a process condition storing part storing process condition data including the processing times and the processing temperatures of the plurality of bread making processes;

a controller controlling the heater driving part to maintain temperature of the oven compartment at the processing temperature by controlling the heating power of each heater according to the temperature detected by the temperature sensor and the process condition data of the process condition storing part; and

a door to open and close a front opening of the oven compartment,

wherein the plurality of heaters further comprises:

-an upper door heater in ~~the~~an upper part of ~~the~~an inside wall of the ~~oven compartment~~door; and

a lower door heater in ~~the~~a lower part of ~~the~~an inside wall of the ~~oven compartment~~door,
; and

~~a door to open and close an front opening of the oven compartment,~~ wherein
the upper oven heater and the upper door heater heat front and back areas of the upper
the of the oven compartment, and

the lower oven heater and the lower door heater heat front and back areas of the lower
parts of the oven compartment.

3. (ORIGINAL) The bread maker according to claim 2, wherein the controller controls the heater driving part to turn the upper oven heater, the upper door heater, the lower oven heater, and the lower door heater off during a kneading process.

4. (ORIGINAL) The bread maker according to claim 2, wherein the controller controls the heater driving part to decrease the heating powers of the upper oven heater and the upper door heater and to relatively increase the heating powers of the lower oven heater and the lower door heater according to the heating powers of the upper oven heater and the upper door heater during a leavening process.

5. (ORIGINAL) The bread maker according to claim 4, wherein the controller

controls the heater driving part so that the heating powers of the upper oven heater and the upper door heater are turned off and duties of the lower oven heater and the lower door heater are about 10 through 40% during the leavening process.

6. (ORIGINAL) The bread maker according to claim 2, wherein the controller controls the heater driving part to increase the heating powers of the upper oven heater and the upper door heater and to relatively decrease the heating powers of the lower oven heater and the lower door heater according to the heating powers of the upper oven heater and the upper door heater during a baking process.

7. (ORIGINAL) The bread maker according to claim 6, wherein the controller controls the heater driving part so that duties of the heating powers of the upper oven heater and the upper door heater are about 80 through 100% and duties of the lower oven heater and the lower door heater are about 70 through 90% during the baking process.

8. (WITHDRAWN) A method to control a bread maker, in which a plurality of heaters heat ingredients to make bread from various directions, performing a plurality of bread making processes in different processing temperatures from each other during predetermined processing times;

storing process condition data of the bread;

sensing temperature of an oven compartment;

controlling a heater driving part to maintain temperature of the oven compartment.

9. (WITHDRAWN) The method according to claim 8, further comprising providing a mixing bag having a bar code registered with data of processing times and processing temperatures for use with the mixing bag.

10. (CURRENTLY AMENDED) A bread maker, including an oven compartment, which accommodates ingredients to make bread using various bread making processes, comprising:

a door to open and close a front opening of the oven compartment;

a plurality of heaters, requiring variable supplied driving powers, to have variable heating powers, multi-directionally heating the ingredients, the plurality of heaters comprising an upper oven heater in an upper part of an inside wall of the oven compartment, ~~and~~ a lower oven heater in a lower part of an inside wall of the oven compartment, and a door heater in an inside wall of

the door;

a heater driving part supplying the driving power to control the heating powers;

a temperature sensor detecting temperature of the oven compartment during multiple ones of the bread making processes;

process condition storage storing process condition data of the bread making processes;

and

a controller controlling the heater driving part to maintain a predetermined temperature in the oven compartment according to the sensed temperature of the oven compartment and the stored process condition data.

11. (CURRENTLY AMENDED) ~~The bread maker according to claim 10A bread maker, including an oven compartment, which accommodates ingredients to make bread using various bread making processes, comprising:~~

a plurality of heaters, requiring variable supplied driving powers, to have variable heating powers, multi-directionally heating the ingredients, the plurality of heaters comprising an upper oven heater in an upper part of an inside wall of the oven compartment and a lower oven heater in a lower part of an inside wall of the oven compartment;

a heater driving part supplying the driving power to control the heating powers;

a temperature sensor detecting temperature of the oven compartment during multiple ones of the bread making processes;

process condition storage storing process condition data of the bread making processes;

a controller controlling the heater driving part to maintain a predetermined temperature in the oven compartment according to the sensed temperature of the oven compartment and the stored process condition data; and

a door to open and close a front opening of the oven compartment,

wherein the plurality of heaters further comprise:

an upper door heater in the upper part of ~~the an~~ inside wall of the ~~oven compartment~~door;

and

a lower door heater in ~~the a~~ lower part of ~~the an~~ inside wall of the ~~oven compartment~~door;

and

~~a door to open and close an front opening of the oven compartment, wherein the upper oven heater and the upper door heater heat front and back areas of an upper portion of the oven compartment, and~~

the lower oven heater and the lower door heater heat front and back areas of a lower

part of the oven compartment.

12. (ORIGINAL) The bread maker according to claim 11, wherein the controller controls the heater driving part to turn the upper oven heater, the upper door heater, the lower oven heater, and the lower door heater off during a kneading process.

13. (ORIGINAL) The bread maker according to claim 11, wherein the controller controls the heater driving part to decrease the heating powers of the upper oven heater and the upper door heater and to relatively increase the heating powers of the lower oven heater and the lower door heater according to the heating powers of the upper oven heater and the upper door heater during a leavening process.

14. (ORIGINAL) The bread maker according to claim 13, wherein the controller controls the heater driving part so that the heating powers of the upper oven heater and the upper door heater are turned off and duties of the lower oven heater and the lower door heater are 10 through 40% during the leavening process.

15. (CURRENTLY AMENDED) The bread maker according to claim ~~11~~¹⁴, wherein the controller controls the heater driving part to increase the heating powers of the upper oven heater and the upper door heater and to relatively decrease the heating powers of the lower oven heater and the lower door heater according to the heating powers of the upper oven heater and the upper door heater during a baking process.

16. (ORIGINAL) The bread maker according to claim 15, wherein the controller controls the heater driving part so that duties of the heating powers of the upper oven heater and the upper door heater are 80 through 100% and duties of the lower oven heater and the lower door heater are 70 through 90% during the baking process.

17. (CURRENTLY AMENDED) A bread maker, including an oven, which accommodates ingredients to make bread in an oven compartment of the oven using various bread making processes involving various kneading processes, comprising:

a door to open and close a front opening of the oven compartment;

a plurality of heaters, requiring variable supplied driving powers, to have variable heating powers, multi-directionally heating the ingredients, the plurality of heaters comprising an upper

oven heater in an upper part of an inside wall of the oven compartment, ~~and~~ a lower oven heater in a lower part of an inside wall of the oven compartment, and a door heater in an inside wall of the door;

- a heater driving part supplying the driving power to control the heating powers;
- a temperature sensor detecting temperature of the oven compartment;
- process condition storage storing process condition data of the bread making processes;

and

a controller controlling the heater driving part to maintain a predetermined temperature in the oven compartment according to the sensed temperature of the oven compartment and the stored process condition data, wherein the controller effectively turns the heaters off and on during the kneading processes according to the detected temperature thereby maintaining at least a setup temperature of the kneading processes.

18. (PREVIOUSLY PRESENTED) A bread maker, including an oven having upper and lower portions, and a door having upper and lower portions, which accommodates ingredients to make bread using various bread making processes involving various leavening processes, comprising:

- a plurality of heaters, respectively, in the lower portion of the oven, the lower portion of the door, the upper portion of the oven, and the upper portion of the door, requiring variable supplied driving powers, to have variable heating powers, heating the ingredients;

- a heater driving part supplying the driving power to control the heating powers;
- a temperature sensor detecting temperature of the oven compartment;
- process condition storage storing process condition data of the bread making processes;

and

a controller controlling the heater driving part to maintain a predetermined temperature in the oven according to the sensed temperature of the oven compartment and the stored process condition data, wherein during the leavening processes, the controller effectively controls the heater in the lower portion of the oven and the heater in the lower portion of the door according to the detected temperature, thereby providing heat.

19. (ORIGINAL) The bread maker according to claim 18, wherein the controller effectively controls the heater in the upper portion of the oven and the upper portion of the door to provide heat to the extent that the ingredients do not burn.

20. (PREVIOUSLY PRESENTED) The bread maker according to claim 1, wherein the inside wall is a vertical wall.